WHAT IS CLAIMED IS:

1.   A method of extracting an image area of interest in an inputted image comprising the steps of:

acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted image; and

searching for the image area of interest in the inputted image using the acquired spatial frequency information and chromaticity information.

2.   A method according to claim 1, wherein said inputted image comprises compressed image data, further comprising a step of decompressing the compressed image data, and wherein in said acquiring step, the spatial frequency information and chromaticity information are acquired from the decompressed image data.

3.   A method according to claim 2, further comprising the steps of:

acquiring quantization parameters for decompression; and

stopping extraction of the image area of interest in accordance with said acquired quantization parameters.

4.   A method according to claim 2, wherein said compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit map data.

5.   A method according to claim 1, wherein said searching step comprises the steps of:

extracting consecutive blocks having a predetermined range of chromaticity value; and

determining whether or not said extracted consecutive blocks are the image area of interest based on an average of spatial frequency value within said extracted consecutive blocks.

6. A method according to claim 5, wherein a threshold level for determining whether or not said extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

7. A method according to claim 5, wherein said searching step further comprises a step of selecting candidates of the image area of interest based on a number of said extracted consecutive blocks.

8. A method according to claim 7, wherein a threshold level for selecting candidates of the image area on interest is changed in accordance with a size of image to be extracted.

9. A method of reconstructing an image from inputted compressed image data comprising the steps of:

extracting an image area of interest in an inputted image having said inputted compressed image data; and

reconstructing an image with correction of image data in the image area of interest to a predetermined value,

wherein said extracting step comprising the steps of:

acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data; and

searching for an image area of interest in an

5   inputted image using the acquired spatial frequency information and chromaticity information.

10.   A method according to claim 9, wherein said predetermined value comprises a predetermined chromaticity value.

10   11.   A method according to claim 9, wherein said extracting step further comprises a step of decompressing the inputted compressed image data, and wherein in said acquiring step, the spatial frequency information and chromaticity information are acquired from the

15   decompressed image data.

12.   A method according to claim 11, further comprising the steps of:

acquiring quantization parameters for decompression; and

20   stopping extraction of the image area of interest in accordance with said acquired quantization parameters.

13.   A method according to claim 11, wherein said compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit

25   map data.

14.   A method according to claim 9, wherein said searching step comprises the steps of:

extracting consecutive blocks having a predetermined
range of chromaticity value; and

determining whether or not said extracted
consecutive blocks are the image area of interest based on
an average of spatial frequency value within said extracted
consecutive blocks.

15. A method according to claim 14, wherein a threshold
level for determining whether or not said extracted
consecutive blocks are the image area of interest is changed
in accordance with a size of image to be extracted.

16. A method according to claim 14, wherein said
searching step further comprises a step of selecting
candidates of the image area on interest based on a number
of said extracted consecutive blocks.

17. A method according to claim 16, wherein a threshold
level for selecting candidates of the image area on interest
is changed in accordance with a size of image to be
extracted.

18. A program for making a computer execute the method
according to claim 1.

19. A storage medium computer-readably storing the
program according to claim 18.

20. A program for making a computer execute the method
according to claim 9.

21. A storage medium computer-readably storing the
program according to claim 20.

22.   An image processing apparatus of extracting an image

area of interest in an inputted image comprising:

first acquiring means for acquiring spatial

frequency information and chromaticity information for

5   respective predetermined blocks from the inputted image;

and

searching means for searching for the image area of

interest in the inputted image using the spatial frequency

information and chromaticity information acquired by said

10   first acquiring means.

23.   An apparatus according to claim 22, wherein said

inputted image comprises compressed image data, further

comprising decompressing means of decompressing the

compressed image data, and wherein in said acquiring step,

15   the spatial frequency information and chromaticity

information are acquired from the decompressed image data.

24.   An apparatus according to claim 23, further

comprising:

second acquiring means for acquiring quantization

20   parameters for decompression; and

stopping means for stopping extraction of the image

area of interest in accordance with said quantization

parameters acquired by said second acquiring means.

25.   An apparatus according to claim 23, wherein said

25   compressed image data comprises JPEG image data and the

decompressed image data includes DCT coefficients and bit

map data.

26.   A method according to claim 22, wherein said
searching means comprises:

extracting means for extracting consecutive blocks
having a predetermined range of chromaticity value; and

5   determining means for determining whether or not said
extracted consecutive blocks are the image area of interest
based on an average of spatial frequency value within said
extracted consecutive blocks.

27.   An apparatus according to claim 26, wherein a
10   threshold level for determining whether or not said
extracted consecutive blocks are the image area of interest
is changed in accordance with a size of image to be
extracted.

28.   An apparatus according to claim 26, wherein said
15   searching means further comprises selecting means for
selecting candidates of the image area on interest based
on a number of said extracted consecutive blocks.

29.   An apparatus according to claim 28, wherein a
threshold level for selecting candidates of the image area
20   on interest is changed in accordance with a size of image
to be extracted.

30.   An image processing apparatus for reconstructing an
image from inputted compressed image data comprising:

extracting means for extracting an image area of
25   interest in an inputted image having said inputted
compressed image data; and

reconstructing means for reconstructing an image with correction of image data in the image area of interest to a predetermined value,

wherein said extracting means comprising:

5   first acquiring means for acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data; and

searching means for searching for an image area
10   of interest in an inputted image using the acquired spatial frequency information and chromaticity information.

31.   An apparatus according to claim 30, wherein said predetermined value comprises a predetermined chromaticity value.

15   32.   An apparatus according to claim 30, wherein said extracting means further comprises decompressing means for decompressing the inputted compressed image data, and wherein said first acquiring means acquires the spatial frequency information and chromaticity information from
20   the decompressed image data.

33.   An apparatus according to claim 32, further comprising :

second acquiring means for acquiring quantization parameters for decompression; and

25   stopping means for stopping extraction of the image area of interest in accordance with said acquired quantization parameters.

34.   An apparatus according to claim 32, wherein said compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit map data.

35.   An apparatus according to claim 30, wherein said searching step comprises the steps of:

extracting consecutive blocks having a predetermined range of chromaticity value; and

determining whether or not said extracted consecutive blocks are the image area of interest based on an average of spatial frequency value within said extracted consecutive blocks.

36.   An apparatus according to claim 35, wherein a threshold level for determining whether or not said extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

37.   An apparatus according to claim 34, wherein said searching step further comprises a step of selecting candidates of the image area on interest based on a number of said extracted consecutive blocks.

38.   An apparatus according to claim 37, wherein a threshold level for selecting candidates of the image area on interest is changed in accordance with a size of image to be extracted.